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Birds of the Sierra Macarena, Eastern Colombia

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The Sierra Macarena is an isolated chain of forest-covered mountains about seventy-five miles long, rising from the low plains, or llanos, of southwestern Meta to a maximum altitude (Pico Rengifo) of approximately 5500 feet. Its northern end is bounded by a loop of the upper Río Güejar and is less than one hundred miles south of Bogotá, and about sixty miles south and a little west of Villavicencio. A low neck of land about seventeen miles wide, extending from the northwestern corner of the Sierra Macarena to the foothills of the Sumapaz Massif (14,960 feet) of the Cordillera Oriental, is the only visible connection with the Andes.

Geological studies have shown that the proximity of the Macarena to the Andes is misleading, as the former evidently is not an offshoot of the latter but is related instead to the more or less isolated hills and mountains to the eastward. These are believed to be remnants of a great plateau, the so-called "Guiana shield" or sandstone table-land, that formerly extended across Venezuela and British Guiana to Surinam. Both zoological and botanical investigations in representative areas from the Andes to the Guianas appear to corroborate this premise. As will become evident beyond, the avifauna of the Sierra Macarena is predominantly that of the eastern lowlands and includes relatively few birds with Andean affinities. Further clarification of faunal relationships in the area has now become possible as the list of Sierra Macarena species treated below is more complete than any other yet published.

The first zoological reconnaissance of the Sierra Macarena was undertaken during the winter of 1941–42 by an expedition of the American Museum of Natural History led by E. Thomas Gilliard (1942). In a period of little more than two months, and working

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under extraordinarily difficult field conditions, Gilliard collected some 650 bird skins representing about 210 species. The majority of his specimens were taken in forests at the eastern base of the Macarena and on the plateau to a maximum altitude of about 4350 feet which, at the time, Gilliard believed to be the summit of the Sierra. Unfortunately, plans for publishing a formal report on this important collection have never been fulfilled. However, some of the material was utilized in various papers by Zimmer and most of the Sierra Macarena records listed by de Schauensee are based on the Gilliard collection.

Less important but of interest in adding a number of species to the Macarena list are the 87 specimens representing 78 forms taken by C. C. Doncaster for the British Museum (Natural History) late in 1949 and early in 1950 while a member of an expedition under the leadership of the British botanist, W. R. Philipson (1951). Doncaster collected in the lowlands at the eastern base of the Macarena and at various altitudes on the eastern slopes to the very summit of Pico Rengifo, or as much as one thousand feet above the highest point reached by his predecessor. The large percentage of Doncaster's birds that were new records for the area is an indication of our limited knowledge of the Macarena avifauna at that time, and influenced Chicago Natural History Museum in its decision to obtain the much more comprehensive collection that is the basis of this report.

The third and much the largest bird collection yet obtained from the Sierra Macarena and its immediate vicinity was made by Kjell von Sneidern early in 1957 (February 16–March 29) under the auspices of Chicago Natural History Museum. This collection, listed below in its entirety, totals some 1100 specimens representing 315 species and includes most of the birds taken by Gilliard and Doncaster. Sixty-eight of the species (indicated by an asterisk) are previously unreported in Meta, and four of these (*Crypturellus noctivagus duidae, Celeus torquatus occidentalis, Xiphocolaptes promeropirhynchus macarenae, Sclerurus rufigularis fulvigularis*) are additions to the known fauna of Colombia.

Present Macarena records from all sources total some 350 species, or at least 60 per cent of the potential for the area. As this is a sufficient sampling for analysis of faunal relationships certain generalities can be made. The great majority of birds inhabiting the Sierra and its immediate vicinity occur extensively in the eastern lowlands and many are of general distribution across the continent east of the Andes. Although isolation caused by climatological and

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ecological factors, or by distance alone, has resulted in considerable diversification of the avifauna, this is largely at subspecific level. In brief, the Macarena fauna is clearly dominated by Amazonian and Guianan species and it is noteworthy that many Amazonian birds found in the eastern lowlands of Colombia occur northward to, but not beyond the Macarena region (Blake, 1961).

Relatively few Macarena birds have Andean affinities and these evidently are restricted to the higher altitudes. Of the 61 resident species collected by von Sneidern on Pico Rengifo (ca. 5000 feet) ten were typical lowland forms taken also at the eastern base of the Sierra. The 51 resident species (22 nonpasseres, 29 passeres) collected on Pico Rengifo alone include representatives of all three major faunal zones, but in significantly diverse percentages. Essentially tropical species (17) and birds that customarily live both in the upper tropical and subtropical zones (22) dominate the higher altitudes of the Macarena. Nevertheless, the Andes exert some influence on the Macarena fauna, as shown by the presence of *Pyrrhomyias cinnamomea pyrrhoptera* and at least ten characteristic subtropical species that have affinities in the cordilleras to the westward.

I am indebted to Dr. E. Thomas Gilliard for unpublished information relating to his Sierra Macarena expedition and collection, and to authorities of the British Museum (Natural History) for permission to include in this paper certain Doncaster records that were not included in de Schauensee's checklist.

ANNOTATED LIST

Tinamus tao larensis Phelps and Phelps, Jr.

Pico Rengifo, 5 ♂, 2 ♀.

Known from "Bogota" collections and several localities near the eastern base of Sierra Macarena where evidently it is quite abundant. In color *larensis* approaches *septentrionalis* of northern Venezuela and British Guiana but it is paler above and below, and decidedly browner, less bluish gray. These differences appear to be constant. Wing: male, 269–281 (average 276); female, 280, 290 (average 285).

***Tinamus major ruficeps** Sclater and Salvin

Los Micos, ♂, ♀; Río Guapaya, 3 ♀; Caño Yerlí, ♂, 2 ♀.

These specimens extend the known range of *ruficeps* northward from the Caquetá region (Morelia) by more than 200 kilometers.

Re-examination of the *ruficeps-peruvianus-olivascens* complex confirms my earlier conviction (1955, p. 10) that "*peruvianus*" is a variable intermediate population, and not certainly distinguishable from *ruficeps*, the northernmost representative of the cline.

Crypturellus cinereus cinereus (Gmelin)

Río Guapaya, ♂, ♀.

This form has two color phases, one essentially fuscous, the second distinctly brownish with auburn nape and crown as in the specimens listed above. Both plumage variations are fortuitous, but either may be dominant or even exclusive locally.

Crypturellus soui caquetae (Chapman)

Los Micos, ♂, 2♀; Plaza Bonita, ♀; Caño Yerlí, ♂.

Typical examples of the nominate form have been reported both from Villavicencio (Meta) and from Mitú (Vaupés) but the Sierra Macarena population is readily separable, agreeing closely with birds from Caquetá (Morelia) and Putumayo (Umbría). Individual specimens from the eastern flank of the Colombian Andes (*caquetae*) have characters attributed either to *caucae* or to *nigriceps*, but as these races are quite variable and have many points of similarity it is evident that the entire complex is in need of a sound revision based on more adequate material than is now available.

Crypturellus undulatus yapura (Spix)

Río Guapaya, 6♂, ♀; Los Micos, ♀.

***Crypturellus noctivagus duidae** Zimmer

Río Guapaya, 2♂; Los Micos, ♂.

These specimens represent a notable extension of range from the upper Orinoco region of southern Venezuela. The three Colombian birds agree in all essential characters with the single paratype at my disposal but are slightly darker and duller (less rufescent) above, yet well within the range of individual variation as discussed by Zimmer. In life their feet were gray or bluish gray as are those of the Venezuelan population.

Anhinga anhinga anhinga (Linnaeus)

Río Guapaya, ♂.

Bubulcus ibis ibis (Linnaeus)

Los Micos, ♀.

Also known from the llanos of Meta.

Leucophoyx thula thula (Molina)

Los Micos, ♀.

***Tigrisoma lineatum lineatum** (Boddaert)

Pico Rengifo, ♀.

This widespread species customarily inhabits the borders of lowland rivers in forest areas. Its presence some distance from any known stream and at a stated altitude of 1500 meters is inexplicable. Examples of *T. s. salmoni* have lately been reported from the eastern base of the Sierra Macarena, but otherwise it is unknown in Colombia east of the eastern Andes.

***Eudocimus albus** (Linnaeus)

Los Micos, ♂.

Apparently rare in Colombia (lower Magdalena River) and hitherto unknown east of the Andes.

Eudocimus rubra (Linnaeus)

Los Micos, ♂, 3 ♀; Río Guapaya, 2 ♀; Plaza Bonita, ♂; Caño Yerlí, ♀.

Widespread and common locally in the eastern llanos.

***Dendrocygna viduata** (Linnaeus)

Los Micos, 5 ♂, 2 ♀.

Seldom reported in Colombia east of the Andes but nevertheless abundant locally.

Amazonetta brasiliensis (Gmelin)

Los Micos, 4 ♂, 2 ♀; Río Guapaya, 2 ♂.

Cairina moschata (Linnaeus)

Los Micos, ♀.

Elanus leucurus leucurus × majusculus

Los Micos, ♀.

The measurements of this specimen (wing, 310; tail, 168) tend to verify Dugand's observation (1951, p. 158) that Colombia is occupied by an intermediate population. This opinion has been accepted by de Schauensee, who nevertheless refers all Colombian specimens to the nominate race as does Phelps for those of Venezuela.

Harpagus bidentatus bidentatus (Latham)

Los Micos, ♂; Río Guapaya, ♀.

Of wide distribution in Colombia east of the Andes but reported in Meta only from Yurimena, a locality in the eastern llanos about 110 kilometers east of Villavicencio.

Ictinea plumbea (Gmelin)

Plaza Bonita, ♀.

Accipiter bicolor bicolor (Vieillot)

Río Guapaya, ♂.

Previous Meta records include only Caño Quenane (near Villavicencio) and Entrada Camp, at the eastern base of the Sierra Macarena (Doncaster Collection).

***Accipiter poliogaster** (Temminck)

Río Guapaya, ♀, March 7, 1957.

One previous Colombian record: Bonda, Santa Marta, ♀, April 26, 1899.

***Accipiter striatus ventralis** Sclater

Pico Rengifo, 2♂.

In my substitution of *striatus* for *erythronemius* as the species name for this race I follow Storer (1952, p. 289) in recognizing the close relationship of northern and tropical American sharp-shinned hawks. The Macarena specimens apparently are the first of record from Meta.

Heterospizias meridionalis (Latham)

Los Micos, 2♂.

The random variability of *meridionalis* throughout its range has been discussed in some detail by Hellmayr and Conover (1949, p. 83, footnote 2). My study of additional material verifies the

existence of a slight mensural cline from north to south but otherwise I find no evidence of geographical variation. Wing: Colombia, 9 males, 383–410 (395 average); Bolivia, Paraguay, and Argentina, 11 males, 388–412 (400 average).

Buteo albicaudatus colonus Berlepsch

Los Micos, ♂.

Buteo magnirostris magnirostris (Gmelin)

Los Micos, ♂, ♀.

Hypomorphnus urubitinga urubitinga (Gmelin)

Pico Rengifo, ♀.

Buteogallus anthracinus (Lichtenstein)

Los Micos, ♀.

***Spizaetus ornatus ornatus** (Daudin)

Río Guapaya, ♂.

One previous record for Colombia east of the Andes (Morelia, Caquetá).

Circus brasiliensis (Gmelin)

Plaza Bonita, ♂.

Geranospiza caerulescens caerulescens (Vieillot)

Caño Yerlí, ♂.

Micrastur gilvicollis gilvicollis (Vieillot)

Río Guapaya, ♂; Pico Rengifo, ♂.

One previous Colombian record—a male in the British Museum (Natural History), collected at Caño Yerlí November 20, 1949, by Doncaster.

Daptrius ater Vieillot

Río Guapaya, 2 ♀.

Daptrius americanus americanus (Boddaert)

Río Guapaya, ♂, ♀.

Mitu salvini (Reinhardt)

"Cerro Macarena," 1 (?).

The British Museum (Natural History) and Instituto de Ciencias Naturales (Bogotá) each has a male collected by Doncaster at Entrada Camp, eastern base of the Sierra Macarena (altitude 450 meters) January 4 and 12, 1950. The species is also known from Putumayo (Río Guamués, Umbría) and (?) Caquetá.

Crax alector Linnaeus

Los Micos, 2 ♀; Río Guapaya, 2 ♂, 2 ♀; Caño Yerlí, ♂, ♀.

Penelope jacquaçu jacquaçu Spix

Los Micos 3 ♂, 2 ♀; Río Guapaya, 2 ♂.

Ortalis guttata guttata Spix

Los Micos, ♂, 3 ♀; Río Guapaya, ♂, 2 ♀.

This excellent series agrees in every respect with birds from Caquetá and Putumayo. As the east Colombia race *caquetae* is indistinguishable from typical *guttata* (Blake, 1955, p. 19) the former must be synonymized.

Pipilo cumanensis cumanensis (Jacquin)

Los Micos, ♂, ♀; Río Guapaya, ♂, 3 ♀; Caño Yerlí, ♀.

Aburria aburri (Lesson)

Pico Rengifo, 4 ♂, 5 ♀, 1(?).

Abundant in forests on the eastern slope of the Sierra Macarena. Two specimens were collected by Doncaster in 1950 on a high ridge (1350 meters) southwest of Entrada Camp. One was deposited in the British Museum (Natural History), and the other in Instituto de Ciencias Naturales (Bogotá).

Colinus cristatus sonnini (Temminck)

Los Micos, 6 ♂, 5 ♀.

Both de Schauensee and Hellmayr and Conover recognize *parvicristatus* but its status remains equivocal. None of the characters listed by Hellmayr and Conover (1942, p. 258, footnote 2) are clearly evident in the Los Micos series. Three Villavicencio (Meta) males and five of the Los Micos males differ in color of under parts

from the sixth Los Micos male, and from a "Bogotá" specimen, and three birds from Carabobo (Venezuela) and the Rio Branco region of northwestern Brazil. Nevertheless there is evidence that birds from the east Colombian lowlands vary individually in the manner of *sonnini*, as reported by Todd (1920, pp. 197–200).

Odontophorus gujanensis buckleyi Chubb

Los Micos, ♂; Río Guapaya, 2♂, ♀; Caño Yerlí, 2♂, ♀; Pico Rengifo, ♀.

Opisthocomus hoazin (Müller)

Los Micos, ♂, ♀; Río Guapaya, ♂.

***Psophia crepitans napensis** Sclater and Salvin

Los Micos, ♀; Río Guapaya, 4♂; Río Yerlí, 2♀.

These birds represent a northward extension of range from the Caquetá region and Amazonas. De Schauensee reports the nominate race from Villavicencio and several other localities in the llanos of Meta but there is no evidence of intergradation.

Aramides cajanea cajanea (Müller)

Los Micos, 2♀; Río Guapaya, ♀; Plaza Bonita, ♂.

Porzana albicollis typhoeca Peters

Los Micos, ♂.

Evidently rare in Colombia. Hitherto reported only from the type locality (Ríofrío, Magdalena) and from Acacías, some 25 kilometers southwest of Villavicencio.

Eurypyga helias helias (Pallas)

Río Guapaya, 2♀.

Jacana jacana intermedia (Sclater)

Los Micos, 7♂, 4♀.

***Capella gallinago delicata** (Ord)

Los Micos, ♂, ♀, February 27, April 13.

Seldom reported in Colombia east of the Andes and never later than March 29. As a Bolivian specimen in Chicago Natural History

Museum was collected July 12 the species can be expected in Colombia considerably before de Schauensee's earliest date of July 24.

Himantopus himantopus mexicanus (Müller)

Los Micos, ♂, 3 ♀.

Burhinus bistriatus vocifer (L'Herminier)

Los Micos, ♂.

Phaetusa simplex simplex (Gmelin)

Los Micos, ♀.

Columba speciosa Gmelin

Pico Rengifo, 3♂, 3 ♀.

Columba cayannensis cayannensis Bonnaterre

Los Micos, 2♂, ♀.

***Columba subvinacea ogilvie-granti** Chubb

Río Guapaya, ♂.

Identical with specimens from eastern Ecuador, Peru, and Bolivia. Earlier Colombian records have been limited to Caquetá. Measurements: wing, 166; tail, 122; bill, 12.

Columba plumbea bogotensis (Berlepsch and Leverkühn)

Río Guapaya, 2♂.

Seldom reported in the eastern lowlands where evidently uncommon and occurring northward only to Cundinamarca (Choachí). One previous Meta record (Buenavista). Measurements: wing, 180, 183; tail, 130, 130.

Columbina minuta minuta (Linnaeus)

Los Micos, 3♂, ♀.

The genus *Columbina* is here substituted for *Columbigallina* (auct.) for reasons set forth by Goodwin (1959) and Johnston (1961).

Leptotila rufaxilla pallidipectus Chapman

Los Micos, ♂, ♀; Río Guapaya, 2 ♀.

These birds and two specimens from Villavicencio (Meta) in Chicago Natural History Museum agree best with a series from Zulia and Arauca. There is some evidence of intergradation with *dubusi* but in my opinon the Meta series represents an intermediate population having closest affinities with the more northern form.

*__Geotrygon montana montana__ (Linnaeus)

Los Micos, ♀; Río Guapaya, 3♂, 3♀; Caño Yerlí, ♂; Pico Rengifo, ♂.

*__Geotrygon violacea albiventer__ Lawrence

Pico Rengifo, 5♂, 7♀.

Previous Colombian records of this subtropical form have been limited to the Santa Marta region. Sierra Macarena birds agree in every respect with a series from Panama and northern Venezuela.

__Geotrygon linearis linearis__ (Prevost)

Pico Rengifo, 2♂, 4♀, 1(?).

The southernmost record for the species and one of the few subtropical birds reported from the Sierra Macarena. Also known from Buenavista (Meta).

*__Ara militaris militaris__ (Linnaeus)

Pico Rengifo, ♀.

Essentially a tropical species for which there are no previous Colombian records east of the Andes.

__Ara macao__ (Linnaeus)

Plaza Bonita, ♂; Caño Yerlí, 2♂, ♀.

__Ara severa castaneifrons__ Lafresnaye

Los Micos, ♂; Río Guapaya, ♀; Caño Yerlí, ♀.

__Aratinga leucophthalmus callogenys__ (Salvadori)

Los Micos, 6♂, 3♀; Río Guapaya, ♂, ♀.

Birds of the Macarena area show no evidence of intergradation with *nicefori* of the nearby Cundinamarca–Meta boundary region. De Schauensee considers *nicefori* an intermediate form linking *A.*

finschi of Central America with *A. leucopthalmus* but on present evidence it might best be regarded simply as a large and somewhat modified representative of the former.

Aratinga pertinax lehmanni Dugand

Los Micos, ♂, ♀.

Pyrrhura melanura souancei (Verreaux)

Río Guapaya, ♂.

Forpus conspicillatus conspicillatus (Lafresnaye)

Los Micos, 2♂, ♀.

Touit huetii (Temminck)

Río Guapaya, ♂.

A male collected for the British Museum (Natural History) by Doncaster at Plaza Bonita (Río Güejar) on November 7, 1949, is the only other Colombian record.

Touit stictoptera stictoptera (Sclater)

A male in the British Museum (Natural History) was collected by Doncaster on a high ridge southwest of Entrada on January 7, 1950. Previous Colombian records have been limited to the Subtropical Zone of the west slope of the eastern Andes.

Pionites melanocephala pallida (Berlepsch)

Río Guapaya, ♂, 2♀.

Pionus menstruus menstruus (Linnaeus)

Los Micos, 2♂, ♀; Río Guapaya, ♂; Caño Yerlí, ♂.

Birds from the Sierra Macarena region are typical of the nominate form both in size (wing, 190–198; average, 195) and in the bright blue coloring of the head and neck. The controversial race, *rubrigularis*, of southern Central America, Colombia west of the eastern Andes, and western Ecuador is easily distinguished by its smaller size (wing, 171–183; average, 177) and relatively dull head coloring. The rose-colored spot on the throat is sometimes, but not consistently larger than in *menstruus*.

Amazona ochrocephala ochrocephala (Gmelin)

Río Guapaya, 1(?).

This specimen agrees in all respects with a series from the Guianas and northern Brazil but some degree of intergradation with *nattereri* can be expected in the Sierra Macarena area. Birds from the eastern base of the Andes in Caquetá (Morelia, Umbría) have their heads tinged with blue as in *nattereri*, but two birds from Tres Esquinas and from Villavicencio (Meta) have been reported as agreeing instead with *ochrocephala* in this respect. Additional material from critical localities obviously is needed to clarify the relationship and distribution of these forms on the eastern flank of the Colombian Andes.

Amazona farinosa inornata (Salvadori)

Río Guapaya, ♀ (?).

The measurements of this specimen (wing, 250; tail, 133) place it with the small race *inornata*, which is similar to *farinosa* in size but usually lacks yellow feathers on the crown. Only one specimen of the larger race *chapmani* (male: wing, 259–278, average, 270; tail, 148–158, average, 152. Female: wing, 255–269, average, 263; tail, 141–145, average 142) is known from Colombia (Umbría, Putumayo).

Crotophaga ani Linnaeus

Los Micos, 2♂, ♀.

***Tapera naevia naevia** (Linnaeus)

Los Micos, ♀.

***Tyto alba contempta** (Hartert)

Los Micos, ♀.

There is no previous record of this species in Colombia east of the Andes. De Schauensee limits the race *contempta* to the Subtropical and Temperate Zones (all three Andean ranges) and considers birds from the Colombian lowlands (Caribbean coast and the lower Magdalena Valley) identical with the large and relatively dark (usually) Central American form *guatemalae*, which properly includes "*subandeana*" (based on a "Bogotá" tradeskin) as shown by Dugand (1945, p. 401). Both *guatemalae* and *contempta* are weakly differentiated clinal populations and as the latter occupies both the Tropical and Subtropical Zones in northwestern Venezuela its presence in the lowlands of eastern Colombia is not surprising.

The high incidence of individual variation in barn owls has both fostered the naming of borderline populations and obscured the clinal relationships that exist in continental South America. Although most recent pulications follow Peters, as modified by subsequent investigators, in recognizing but four subspecies on the mainland of South America, there is no general agreement as to their distribution, relationships, and respective merits. I am indebted to Melvin A. Traylor for permission to draw extensively on his unpublished notes for data in support of the following observations.

Geographic variation in South American barn owls follows a fairly simple pattern but individuals of any given locality or region may be remarkably variable both in size and in color. Birds from the northern part of the continent south to the Amazon basin on the east and through Ecuador on the west average larger (wing: 11 males, 292–336, average 317; 7 females, 293–333; average 317) than those from Bolivia and Uruguay southward (wing: 5 males, 301–316, average 306; 8 females, 288–323, average 307) but separation of northern and southern populations on the basis of size alone obviously is not feasible. The trend toward increase in size from south to north is further illustrated by the measurements of the race *guatemalae* of Central America and extreme northern Colombia (wing: 4 males, 314–336, average 325; 6 females, 313–335, average 326).

A color cline in which there is an average increase in darkness from south to north parallels the mensural cline discussed above. Birds from the highlands of Colombia, Ecuador, and Venezuela average darker than those from the south or east, and Central American birds tend to be the darkest as well as the largest of all. Thus the four tropical American populations presently recognized might be characterized as follows: *tuidara*, small and pale; *hellmayri*, medium-sized and pale; *contempta*, medium-sized and dark; *guatemalae*, large and dark.

The characteristics mentioned above reflect average population differences to which there are numerous individual exceptions. Although the extremes *tuidara* and *guatemalae* are separable with some degree of certainty by criteria of both color and size, there is scarcely any distinction between any two of the contiguous populations. However, the names in current use are a convenience in discussing the several overlapping "populations" of the two independently varying clines and can be retained with profit.

Otus choliba crucigerus (Spix)

Los Micos, ♂.

Otus watsonii watsonii (Cassin)

Río Guapaya, ♂, 2 ♀.

Speotyto cunicularia carrikeri Stone

Los Micos, ♀.

Ciccaba virgata subsp.

Los Micos, ♂.

Olivares (MS.) refers two Sierra Macarena birds to *macconnelli*, which de Schauensee has reported with reservations from Morelia. The Los Micos specimen (April 12) agrees best with a series from the Cauca Valley but it is in subadult plumage and can not be allocated with certainty.

Steatornis caripensis Humboldt

Río Guapaya, ♂.

Also known from Río Dudita, at the eastern base of the Sierra Macarena.

Nyctibius grandis (Gmelin)

Río Guapaya, ♂.

Nyctibius griseus griseus (Gmelin)

Río Guapaya, ♂.

Nyctidromus albicollis albicollis (Gmelin)

Los Micos, 3♂, 4 ♀ ; Río Guapaya, 2♂.

Caprimulgus maculicaudus (Lawrence)

Los Micos, ♀.

Two of the three previous Colombian records are from localities east of the Andes. A very rare forest species and evidently of decidedly local occurrence.

Doryfera johannae johannae (Bourcier)

Pico Rengifo, ♂.

*__Phaethornis malaris moorei__ Lawrence

Río Guapaya, ♀.

Zimmer (1950a, pp. 17–18) has shown that *moorei* and several other forms traditionally considered varieties of *superciliosus* have closer affinities with *malaris*. The nominate form and its relatives are linked by an intermediate population, *insolitus*, which is known in Colombia only from the west bank of Río Guainiá near the mouth of the Casiquiare. There is no previous record of *moorei* north of Caquetá.

__Phaethornis griseogularis griseogularis__ Gould

Río Guapaya, ♂.

*__Phaethornis longuemareus atrimentalis__ Lawrence

Los Micos, 2♂, ♀; Río Guapaya, 2♂.

These specimens agree in all respects with a series from eastern Peru (Puerto Bermúdez, Yarinacocha). They represent a northward extension of range from Caquetá (Florencia).

*__Colibri delphinae__ (Lesson)

Pico Rengifo, 5♂, 3♀.

*__Colibri thalassinus cyanotis__ (Bourcier)

Pico Rengifo, ♀.

One of the very few exclusively subtropical forms known from the Sierra Macarena and presumably limited to the upper slopes.

__Klais guimeti guimeti__ (Bourcier)

Pico Rengifo, 5♂, ♀, 1(?).

*__Chlorostilbon mellisuga phoeopygus__ (Tschudi)

Los Micos, ♀.

This specimen is referred to *phoeopygus* with reservations, as birds from the Sierra Macarena area may prove to be more typical of *nanus*, which occurs southward at least to the Casanare region. Reasons for substituting *mellisuga* for *prasinus* as the species name have been set forth by Zimmer (1950b, pp. 4–5).

__Thalurania furcata nigrofasciata__ (Gould)

Los Micos, ♀; Río Guapaya, ♂; Pico Rengifo, 2♀.

Chrysuronia oenone oenone (Lesson)

Pico Rengifo, 2♂, 2♀.

In length of bill (20–23 mm.), as in other respects, Sierra Macarena birds and a series from Boyacá agree with specimens from Trinidad, Venezuela, and Ecuador in Chicago Natural History Museum. Although specimens measured by Zimmer (op. cit., p. 27) appear to justify the separation of Colombian birds, for which the name *longirostris* is available, more conclusive evidence of their distinctness is desirable to offset objections that can be raised on geographical grounds.

Amazilia viridigaster viridigaster (Bourcier)

Pico Rengifo, ♀.

Heliodoxa leadbeateri parvula Berlepsch

Pico Rengifo, 2♂, 3♀.

Ocreatus underwoodi underwoodi (Lesson)

Pico Rengifo, 4♂, ♀.

***Heliothryx aurita aurita** (Gmelin)

Río Guapaya, ♂.

Also known from Maipures, extreme eastern Vichada, and the lower Río Igará-paraná, Putumayo.

Pharomachrus mocinno antisianus (d'Orbigny)

Pico Rengifo, 7♂, ♀.

Trogon melanurus eumorphus Zimmer

Río Guapaya, ♂; Caño Yerlí, ♀.

Trogon viridis viridis Linnaeus

Los Micos, ♂, 2♀; Río Guapaya, ♂, ♀.

Trogon collaris exoptatus Cabanis and Heine

Pico Rengifo, 4♂, 3♀.

***Trogon rufus sulphureus** Spix

Río Guapaya, ♂.

One previous record for Colombia: Morelia, Caquetá.

***Trogon curucui peruvianus** Swainson

Los Micos, ♂.

A northward extension of range from Caquetá.

***Trogon violaceus crissalis** (Cabanis and Heine)

Los Micos, ♂.

Replaced in the north (Catatumbo Basin) and west of the Eastern Andes by *caligatus*. The Los Micos bird is the first of record north of Caquetá.

Ceryle torquata torquata (Linnaeus)

Los Micos, ♂.

Chloroceryle amazona amazona (Latham)

Río Guapaya, ♂, ♀.

Chloroceryle americana americana (Gmelin)

Río Guapaya, 4♂, 3♀.

Chloroceryle inda (Linnaeus)

Río Guapaya, ♂, ♀.

Momotus momota microstephanus Sclater

Los Micos, 2♀; Río Guapaya, 3♂, ♀.

Jacamerops aurea aurea (Müller)

Los Micos, ♂.

A female in the British Museum (Natural History) was collected by Doncaster at Plaza Bonita on November 14, 1949.

***Galbula albirostris chalcocephala** Deville

Los Micos, ♂; Río Guapaya, ♂; Caño Yerlí, ♀.

Galbula tombacea tombacea Spix

Los Micos, 6♂, 2♀.

Bucco capensis dugandi Gilliard

Río Guapaya, ♂.

This specimen is conspicuously paler above and on the cheeks than a British Guiana example of *capensis* and in all respects agrees with the description of *dugandi*. De Schauensee has noted the similarity of specimens from Caquetá and Brazil. Although he found a bird from eastern Ecuador to be even darker than one from British Guiana, the three Ecuador and Peruvian examples available to me are very little if at all darker than the pale Meta specimen listed above. On present evidence the status of *dugandi* appears to be somewhat equivocal but I am inclined to recognize it in view of Dugand's observation that Meta specimens are consistently paler than those from Brazil and British Guiana.

Malacoptila fusca fusca (Gmelin)

Río Guapaya, ♀.

Micromonacha lanceolata lanceolata (Deville)

A female in the British Museum (Natural History) was collected by Doncaster in Guapaya Forest on December 14, 1949. There is but one previous Colombian record of this rare bird east of the Andes (Río Dudita, eastern base of the Sierra Macarena).

Monasa nigrifrons nigrifrons (Spix)

Los Micos, 4♂, ♀; Caño Yerlí, ♀ juv.

The bill of the young female (February 22) is dull yellowish white and its throat and chest are conspicuously tinged with reddish coloring.

Monasa morphoeus peruana Sclater

Los Micos, 3♂, ♀; Río Guapaya, ♂, 3♀; Caño Yerlí, ♂.

The Los Micos female has the normal white of the face and chin replaced by tawny buff to an accentuated degree. There is virtually no darkening of the throat feathers.

Monasa flavirostris Strickland

A male in the British Museum (Natural History) was collected by Doncaster in Guapaya Forest on November 29, 1949. Also known from Villavicencio and Buenavista (Meta).

Capito niger punctatus (Lesson)

Los Micos, ♂, 4♀; Río Guapaya, 2♂, ♀.

***Capito bourcieri bourcieri** (Lafresnaye)

Pico Rengifo, ♂, ♀.

Colombian records have been limited to "Bogotá" collections and several localities in the upper Magdalena Valley. As the race is also known from Táchira and Barinas, Venezuela, it is to be expected in suitable habitat for an unknown distance southward on the eastern slope of the eastern Andes. The race *orientalis* has lately been reported east of the Andes in extreme southeastern Nariño.

Ramphastos ambiguus ambiguus Swainson

Pico Rengifo, ♀.

Ramphastos tucanus cuvieri Wagler

Los Micos, 3♂, ♀; Río Guapaya, 2♂, 2♀.

Pteroglossus pluricinctus Gould

Río Guapaya, 2♂.

Pteroglossus flavirostris flavirostris Fraser

Río Guapaya, ♂.

Pteroglossus inscriptus humboldti Wagler

Río Guapaya, ♂.

In a recent paper Borrero (1959) showed that the affinities of *humboldti* lie with *inscriptus* instead of with *viridis* and verified Friedmann's discovery (1958) that *P. didymus* is only a plumage phase (subadult) of *humboldti*. The Río Guapaya specimen is fully adult and agrees well with birds from northeastern Peru.

Picumnus squamulatus squamulatus Lafresnaye

Los Micos, ♂; Caño Yerlí, ♂.

Chrysoptilus punctigula punctipectus Cabanis and Heine

Los Micos, ♂.

I refer this specimen to *punctipectus* with reservations, as it is not fully adult and differs in several respects from the three Venezuelan examples available to me. It differs especially in having a greener (less yellowish green) back, heavier dorsal barring, much

blacker throat with smaller white spots, and greenish olive (not brownish olive) breast. The race is known from the vicinity of Villavicencio, but the Los Micos bird may represent a population intermediate to *speciosus* of the southeastern lowlands southward. Wing, 102; tail, 56; exposed clumen, 18.

Piculus rubiginosus buenavistae (Chapman)

Pico Rengifo, 3♂, ♀.

***Piculus flavigula magnus** (Cherrie and Reichenberger)

Los Micos, ♀.

A northward extension of range from Caquetá (Morelia).

Celeus jumana citreopygius Sclater and Salvin

Río Guapaya, 3♂, 2♀, 1(?).

***Celeus grammicus verreauxi** (Malherbe)

Río Guapaya, ♂.

Known from the Caquetá region (Morelia) and eastern Ecuador.

Celeus flavus flavus (P. L. S. Müller)

Los Micos, ♂; Río Guapaya, 3♂, 3♀.

***Celeus torquatus occidentalis** (Hargitt)

Río Guapaya, ♂, 2♀.

There is no previous record of this species in Colombia. The specimens listed are clearly referable to the distinctive western race but one of the females unaccountably has relatively sparse barring below, and scattered spots on the belly represent the black bars of typical specimens.

Dryocopus lineatus lineatus (Linnaeus)

Los Micos, ♀.

Melanerpes cruentatus (Boddaert)

Los Micos, 4 ♂, ♀; Río Guapaya, ♂.

The characters attributed to *extensus* are not evident in this series, and I can find no consistent differences between Guiana birds and those from elsewhere. The crimson area of the under parts is highly

variable as to extent, in part reflecting the "make" of the skin, and there is much random variation in the tone of color. In my opinion the average differences noted by Todd do not justify recognition of *extensus*.

Veniliornis affinis orenocensis Berlepsch and Hartert

Los Micos, ♂, 3 ♀.

Phloeoceastes melanoleucos melanoleucos (Gmelin)

Los Micos, ♂; Río Guapaya, 2 ♂, 2 ♀.

Phloeoceastes rubricollis rubricollis (Boddaert)

Los Micos, 2 ♂, ♀.

Dendrocincla fuliginosa phaeochroa Berlepsch and Hartert

Los Micos, 3 ♂; Río Guapaya, ♂, 2 ♀, 2(?).

***Sittasomus griseicapillus amazonus** Lafresnaye

Pico Rengifo, ♂.

Glyphorynchus spirurus rufigularis Zimmer

Los Micos, ♂; Pico Rengifo, 2 ♀, 1(?).

***Xiphocolaptes promeropirhynchus macarenae** Blake

Río Guapaya, ♂; Pico Rengifo, ♂, ♀.

These specimens are the first examples of the species known from southeastern Colombia. The race is distinguished from other South American forms of *promeropirhynchus* in lacking shaft streaks on the mantle and back, and from the nominate race of northwestern Venezuela and Colombia west of the eastern Andes in having a pale (not black) bill, paler throat and darker, less reddish upper parts. Wing, 137–140; tail, 113–119; exposed culmen, 43–47.

***Dendrocolaptes certhia radiolatus** Sclater and Salvin

Los Micos, ♂, 2 ♀.

A northward extension of range from the Caquetá region. Other races occupy the western base of the eastern Andes south to Santander and extreme eastern Colombia (Matabén).

***Dendrocolaptes picumnus validus** Tschudi

Pico Rengifo, ♂, ♀.

De Schauensee questions the occurrence of *validus* north of Caquetá but both Sierra Macarena specimens agree in all respects with a series from eastern Peru. There is no evidence of intergradation with *multistrigatus* of northwestern Venezuela and Colombia west of the eastern Andes.

Xiphorhynchus picus subsp.

Los Micos, ♂.

This specimen cannot be referred with certainty to any known race and may represent either an intermediate population or an undescribed form. In most respects it is nearest *saturatior*, but somewhat smaller (wing, 96; tail, 89; exposed culmen, 26), paler and more rufescent below, and with narrower buffy markings on the chest. In addition, the pale streaks on the crown and nape are less rufescent than in typical *saturatior*, and streaking of the under parts is more extended posteriorly. I have not seen the Morelia (Caquetá) race *borreroi* but evidently it differs from the Los Micos bird in several respects. The status of the Los Micos bird (and of *borreroi*) is further complicated by the observation of Dugand and Borrero (1948, p. 139) that specimens from Villavicencio (Meta) and Tres Esquinas (Caquetá) are indistinguishable. Birds from both localities are as yet of uncertain identity.

Xiphorhynchus spixii buena-vistae Zimmer

A female in the British Museum (Natural History) was collected at "Yerlí Forest" by Doncaster on November 24, 1949.

Xiphorhynchus guttatus guttatoides (Lafresnaye)

Los Micos, ♂, ♀; Río Guapaya, ♂, ♀; Pico Rengifo, 3 ♂, ♀.

Campylorhamphus trochilirostris venezuelensis (Chapman)

Río Guapaya, ♀.

***Synallaxis albigularis** Sclater

Los Micos, ♂, ♀.

Also known from the lowlands of Caquetá and Putumayo.

Synallaxis gujanensis columbianus Chapman

Los Micos, ♂.

***Synallaxis rutilans caquetensis** Chapman

Río Guapaya, ♂(?).

A northward extension of range from Caquetá.

Premnoplex brunnescens brunnescens (Sclater)

Pico Rengifo, 4 ♂, 1(?).

***Hyloctistes subulatus subulatus** (Spix)

Río Guapaya, ♂.

Ancistrops strigilatus strigilatus (Spix)

Los Micos, ♂, ♀.

An earlier record from the Sierra Macarena area (Yerlí Forest) is based on a female in the British Museum (Natural History) collected by Doncaster on November 25, 1949.

***Philydor pyrrhodes** (Cabanis)

Río Guapaya, ♂.

I have some reservations as to the identity of this specimen, as it appears to differ in several respects from typical *pyrrhodes* and may represent an undescribed form. As compared with a Brazilian specimen (São Paulo do Olivença, Rio Solimoes) the Río Guapaya bird is smaller in all dimensions (wing, 86; tail, 62; culmen to base, 19), less rufous (more brownish olive) above, and has somewhat paler upper tail coverts. Only the Guapaya specimen has the middle rectrices faintly tinged terminally with dusky coloring.

***Automolus infuscatus infuscatus** (Sclater)

Río Guapaya, ♂; Caño Yerlí, ♂.

A northward extension of range from Caquetá.

Automolus ochrolaemus turdinus (Pelzeln)

Los Micos, ♂, ♀; Río Guapaya, 5 ♂, ♀.

Automolus rufipileatus consobrinus (Sclater)

Río Guapaya, ♂.

Sclerurus albigularis albigularis Sclater and Salvin

Pico Rengifo, ♂.

Also known from Buenavista, above Villavicencio. The Sierra Macarena bird is indistinguishable from an example from Mount Turumiquire, northeastern Venezuela.

Sclerurus mexicanus andinus Chapman

Pico Rengifo, 1(?).

***Sclerurus rufigularis fulvigularis** Todd

Los Micos, ♂; Río Guapaya, ♀; Pico Rengifo, ♀.

No previous examples of *rufigularis* have been reported from Colombia. The specimens listed above vary considerably in color; one might be referred to *brunnescens* but the others are nearer *fulvigularis*. The former is described as differing from *fulvigularis* in its relatively deeper, more brownish (less rufescent) coloration, especially of the under parts and wing-edgings. These differences are evident in the Macarena series but there is no reason to regard the Colombian birds as intermediates, for the same diversity of color can be found in series of both *brunnescens* and *fulvigularis*. Of seventeen birds examined, two specimens from French Guiana approach the most extreme examples of *brunnescens* and several examples of that form are indistinguishable from *fulvigularis*. On present evidence there appears to be no way to separate the two forms.

***Sclerurus caudacutus brunneus** Sclater

Río Guapaya, 5 ♂, 3 ♀.

Previous Colombian records have been limited to the Caquetá region but according to Peters *brunneus* is also known by "Bogotá" specimens.

Cymbilaimus lineatus intermedius (Hartert and Goodson)

Los Micos, ♂; Río Guapaya, 4 ♂, 2 ♀.

Taraba major granadensis (Cabanis)

Río Guapaya, 3 ♂, ♀.

Thamnophilus schistaceus capitalis Sclater

Los Micos, ♀; Río Guapaya, 4 ♂, ♀.

Thamnophilus punctatus interpositus Hartert and Goodson
Los Micos, 3 ♂, 2 ♀.

Dysithamnus mentalis semicinereus Sclater
Pico Rengifo, 4 ♂, 4 ♀.

Dysithamnus ardesiacus ardesiacus Sclater and Salvin
Río Guapaya, 2 ♀.

Thamnomanes caesius glaucus Cabanis
Los Micos, 2 ♀; Río Guapaya, 4 ♂, 2 ♀; Caño Yerlí, ♀.

Myrmotherula hauxwelli suffusa Zimmer
Río Guapaya, ♂, 2 ♀.

Myrmotherula erythrura erythrura Sclater
Río Guapaya, 2 ♂.

Myrmotherula axillaris melaenia (Sclater)
Los Micos, 2 ♂; Río Guapaya, 3 ♂, 4 ♀; Caño Yerlí, 4 ♂, ♀.

Myrmotherula behni behni Berlepsch and Leverkühn
Pico Rengifo, 2 ♂, ♀.
Colombian records are limited to "Bogotá" trade skins and the upper slopes of the Sierra Macarena.

Myrmotherula menetriesii pallida Berlepsch and Hartert
Los Micos, 2 ♂; Río Guapaya, 2 ♂, ♀; Caño Yerlí, ♀.

***Dichrozona cincta cincta** (Pelzeln)
Río Guapaya, ♂.
Also known from Caquetá and extreme eastern Vaupés (Río Guainía).

Cercomacra cinerascens cinerascens (Sclater)
Los Micos, ♀; Río Guapaya, ♂, ♀.

Cercomacra tyrannina tyrannina (Sclater)
Los Micos, ♂; Río Guapaya, 3 ♂.

Myrmoborus myotherinus elegans (Sclater)

Los Micos, ♂; Río Guapaya, 3 ♂, 3 ♀; Caño Yerlí, ♀.

A male in the British Museum (Natural History) was collected by Doncaster on January 5, 1950, on a high ridge southwest of Entrada Camp.

Hypocnemoides melanopogon occidentalis Zimmer

Los Micos, ♂.

Of wide distribution in the eastern lowlands but seldom reported. There is only one previous record from Meta (Quenane, east of Villavicencio).

Percnostola leucostigma subplumbea (Sclater and Salvin)

Río Guapaya, ♂, ♀; Caño Yerlí, ♂.

Myrmophylax atrothorax metae (de Schauensee)

Los Micos, 2 ♂, 2 ♀.

***Formicarius colma colma** Boddaert

Los Micos, 2 ♂, 1(?); Río Guapaya, 2 ♂.

Known from "Bogotá" trade skins but not reported from the eastern flank of the Andes north of Caquetá.

Formicarius analis connectens Chapman

Río Guapaya, 2 ♂, 2 ♀.

Chamaeza campanisona columbiana Berlepsch and Stolzmann

Pico Rengifo, 6 ♂, ♀, 1(?).

Reported only from "Bogotá" and Buenavista, above Villavicencio.

***Chamaeza nobilis rubida** Zimmer

Río Guapaya, ♂, ♀.

A female in the British Museum (Natural History) was collected by Doncaster at "Entrada-Guyapa" (*sic*) on January 11, 1950. Previous Colombian records of this form have been limited to one locality each in Caquetá and Putumayo.

Gymnopithys leucaspis leucaspis (Sclater)

Río Guapaya, 2 ♂, 3 ♀.

Hylophylax naevia theresae (Des Murs)

Río Guapaya, 3 ♂, ♀; Caño Yerlí, 2 ♀.

Hylophylax poecilinota duidae Chapman

Los Micos, ♂, ♀; Río Guapaya, ♂, 6 ♀.

I have not seen topotypical examples of *duidae* but the characters of that race are quite evident in the Macarena series when compared with specimens of *lepidonota* from northeastern Peru. Although possibly not wholly typical of *duidae*, it is clear that the birds here listed cannot be referred elsewhere.

***Phlegopsis nigro-maculata nigro-maculata** (d'Orbigny and Lafresnaye)

Río Guapaya, 2 ♀.

These specimens agree in all respects with birds from eastern Peru and represent a significant northward extension of range from Putumayo (Umbría).

Myrmothera campanisona modesta (Sclater)

Río Guapaya, ♂, 3 ♀.

***Corythopis torquata sarayacuensis** Chubb

Los Micos, ♂; Río Guapaya, ♂.

Two "Bogotá" trade skins have been referred to this form and a female is known from Cuembí, Putumayo. Both Sierra Macarena specimens differ from Chubb's description of the type in being uniformly olive brown (not "rufous-brown") above, and in lacking a "golden-brown collar on the hind-neck." They resemble *torquata* in color of the under parts but are nearer *anthoides* above. Wing, 65, 67; tail, 48, 52.

Scytalopus femoralis confusus Zimmer

Pico Rengifo, ♂.

This specimen has the scalloped ventral plumage of a subadult bird. Its whitish coronal spot is very small, poorly defined, and barely perceptible. There is but one previous record from Meta (Buenavista, above Villavicencio). Wing, 55.5; tail, 44; exposed culmen, 12; culmen from base, 15.

*Attila spadiceus spadiceus** (Gmelin)

Caño Yerlí, ♂.

De Schauensee records only one previous record for Colombia (Morelia, Caquetá).

Laniocera hypopyrrha (Vieillot)

Los Micos, 2 ♀; Río Guapaya, ♂, 2 ♀.

A female in the British Museum (Natural History) was collected by Doncaster, December 3, 1949, on a high ridge west of Entrada. Guaicaramo (Boyacá) and the several localities at the eastern base of the Sierra Macarena are the only other specific localities in Colombia known for this species.

Rhytipterna simplex frederici (Bangs and Penard)

Los Micos, 2 ♀; Río Guapaya, 2 ♂.

Two of these specimens are slightly duskier above and have darker throats and chests than typical examples of *frederici*, but the differences appear to be fortuitous.

Lipaugus vociferans (Wied)

Río Guapaya, 4 ♂, 2 ♀.

Pachyramphus polychopterus niger (Spix)

Los Micos, 2 ♂.

A female in the British Museum (Natural History) was collected by Doncaster, January 26, 1950, on a high ridge west of "Entrada."

Platypsaris minor (Lesson)

Río Guapaya, 2 ♂.

Tityra cayana candida de Schauensee

Los Micos, ♂, 2 ♀; Río Guapaya, 2 ♀.

*Querula purpurata** (Müller)

Río Guapaya, 2 ♀.

Rather common and of general distribution in humid lowland forests but evidently not previously reported from Meta.

Cephalopterus ornatus ornatus Geoffroy Saint-Hilaire

Los Micos, ♀.

Gymnoderus foetidus (Linnaeus)

Plaza Bonita, ♀.

***Piprites chloris antioquiae** Chapman

Río Guapaya, 2 ♂.

De Schauensee (1952, p. 1197) refers birds from the eastern slope of the Andes ("Bogotá," Morelia, Río San Miguel) to *antioquiae* provisionally. The Guapaya specimens and a "Bogotá" trade skin in Chicago Natural History Museum approach *tschudii* of Peru in dorsal coloring but a closer relationship to *antioquiae* of the lower Cauca Valley is evident in the much brighter yellow of their under parts. These specimens are the first of record from Meta.

Pipra coronata carbonata Todd

Los Micos, ♀; Río Guapaya, 4 ♂, 2 ♀; Plaza Bonita, ♀.

Pipra erythrocephala berlepschi Ridgway

Los Micos, 2 ♀.

Pipra pipra coracina Sclater

Pico Rengifo, 6 ♂, 2 ♀.

Teleonema filicauda filicauda (Spix)

Río Guapaya, ♀.

Machaeropterus regulus striolatus (Bonaparte)

Los Micos, ♂, ♀; Río Guapaya, ♂.

Also known from Villavicencio but evidently uncommon north of Caquetá.

Tyranneutes stolzmanni (Hellmayr)

Los Micos, ♂, 2 ♀.

Manacus manacus interior Chapman

Los Micos, ♂.

***Schiffornis turdinus** subsp.

Río Guapaya, ♀.

I am unable to allocate this specimen to any known race but hesitate to describe it as new without additional material. In color of the under parts it approaches *stenorhynchus*, but the throat and chest are only faintly tinged with brown and the dorsal plumage is clearer olive, with a relatively slight reddish tone. There is also some similarity to *amazonus*, especially as to the color of the upper parts, but the Río Guapaya specimen is markedly paler and less intensely olive below. Measurements: *S. t. stenorhynchus* (9 specimens), wing, 88–94 (average 91); tail, 59–68 (average 62). *S. t. amazonus* (female), wing, 86; tail, 62. *S. t. subsp.* (Río Guapaya female), wing, 83; tail, 63.

Ochthornis littoralis (Pelzeln)

Plaza Bonita, 2 ♀.

Muscivora tyrannus tyrannus (Linnaeus)

Los Micos, ♀ (April 14).

Tyrannus melancholicus melancholicus Vieillot

Los Micos, 2 ♂.

Empidonomus varius varius (Vieillot)

Los Micos, ♂, 2 ♀ (April 13 and 28).

These specimens and two birds from Boyacá (April 21, 28) agree closely with a series from southern Brazil and eastern Bolivia. The less heavily marked race *rufinus* of northern and eastern Brazil is known as a summer visitant in northwestern Venezuela and doubtless will be found in the eastern llanos at that season.

Myiodynastes maculatus solitarius (Vieillot)

Los Micos, ♂, 4 ♀ (April 12–22).

Myiodynastes chrysopeplus minor Taczanowski and Berlepsch

Pico Rengifo, 4 ♂.

Myiozetetes similis similis (Spix)

Los Micos, ♀; Plaza Bonita, ♀.

Myiozetetes granadensis obscurior Todd

Río Guapaya, ♀.

Pitangus lictor lictor (Lichtenstein)

Los Micos, ♂.

Myiarchus ferox ferox × brunnescens

Los Micos, 4 ♂, 2 ♀.

Wetmore (1953, p. 6) has called attention to de Schauensee's error in referring Villavicencio birds to *brunnescens* instead of *australis* but there is uncertainty as to the proper allocation of birds from other localities in the eastern llanos. The Los Micos specimens approach the nominate form in size (wing, ♂ 88–92, average 90.4; tail, ♂, 82–90, average, 88) but their darker and browner upper parts and their ventral coloring suggest some intermixture with *brunnescens*. Two males from Arauca (Río Cobaría) and Boyacá (Río Cobugón) are still nearer *brunnescens*, especially in size and in color of the under parts.

Myiarchus tuberculifer tuberculifer (Lafresnaye and d'Orbigny)

Los Micos, ♀.

Contopus virens virens (Linnaeus)

Pico Rengifo, 2 ♂ (March 30).

***Empidonax traillii traillii** (Audubon)

Los Micos, 2 ♂, 4 ♀ (April 14–28).

Terenotriccus erythrurus signatus Zimmer

Río Guapaya, 2 ♂.

***Pyrrhomyias cinnamomea pyrrhoptera** (Hartlaub)

Pico Rengifo, 2 ♂.

Sierra Macarena birds agree in detail with a series from Boyacá (La Primavera, altitude 7000 feet) and represent a considerable southward extension of range east of the Andes. As Pico Rengifo barely reaches the minimum latitude that appears to be adequate for this race its distribution in the Sierra Macarena doubtless is very restricted.

Platyrinchus mystaceus neglectus (Todd)

Pico Rengifo, ♀.

***Cnipodectes subbrunneus minor** Sclater

Los Micos, immature ♀ (?); Río Guapaya, ♂.

Previously known in Colombia only from Caquetá and Putumayo. The various peculiarities of this remarkable species have been discussed in detail by Zimmer (1939, pp. 9–12). His characterization of *minor* is clearly applicable to the male listed above which has both the wing structure and the measurements (wing, 96; tail, 83) of a mature bird. The immature specimen (February 25) evidently is missexed as its measurements (wing, 80; tail, 67) lie between those of the adult male and female. The younger bird is deep chocolate brown (not brownish olive) above and its wing coverts, secondaries, and tail feathers are conspicuously edged with rich chestnut.

***Tolmomyias assimilis obscuriceps** Zimmer

Los Micos, ♂; Río Guapaya, ♀.

These specimens have some characteristics of both *obscuriceps* and *neglectus* but appear to be nearer the former. A larger series is needed to determine the affinities of the Meta population with certainty.

Tolmomyias flaviventris collingwoodi (Chubb)

Los Micos, ♂.

Also reported from the vicinity of Villavicencio (Quenane) and extreme eastern Vichada. Meta specimens show no evidence of intergradation with either *viridiceps* (Caquetá) or *aurulentus* (Santa Marta, etc.) and can be considered typical of *collingwoodi*.

Rhynchocyclus olivaceus aequinoctialis (Sclater)

A male in the British Museum (Natural History) collected by Doncaster on a high ridge west of Entrada, January 26, 1950, is presumed to represent this race as it has been reported from Río Dudita (eastern base of the Sierra Macarena).

Ramphotrigon ruficauda (Spix)

Río Guapaya, ♂.

Ramphotrigon megacephala pectoralis Zimmer and Phelps

Río Guayapa, ♂.

De Schauensee has reported that birds from Río Dudita (eastern base of the Sierra Macarena) agree "well enough" with a Putumayo specimen which he considers similar to the race of southern Venezuela. As these birds are not now available to me I refer the Río Guayapa specimen to *pectoralis*, but with reservations in view of the fact that its measurements (wing, 64; tail, 55; culmen from base, 14) are much closer to those of *venezuelensis* (wing, 64; tail, 56.5; culmen from base, 16) than to those of *pectoralis* (wing, 60; tail, 50; culmen from base, 16).

Todirostrum chrysocrotaphum guttatum Pelzeln

Los Micos, ♂.

Similar to a specimen from Boca Río Peruaté (northeastern Loreto, Peru) in having a well-developed white supra-loral streak that meets the conspicuous yellow superciliaries above the anterior edge of the eye. However, all yellow parts of the Los Micos specimen are somewhat richer (less greenish) in color than those of the Peruaté bird, and the markings of the malar region and chest are both smaller and much less numerous. The black-headed race, *nigriceps*, known by its white throat and immaculate chest, has lately been found east of the Andes in Arauca (Blake, 1961, p. 37).

Todirostrum cinereum cinereum (Linnaeus)

Los Micos, ♂.

***Lophotriccus vitiosus guianensis** Zimmer

Río Guapaya, ♂.

This specimen and a fine series from British Guiana (Rockstone) and Surinam (Zuid River) are virtually indistinguishable, but the former may represent a population intermediate to *affinis* as the margins of its crest-feathers are not quite as pure gray as in the Guiana birds. Both *guianensis* and *affinis* are known from the eastern lowlands but on present evidence birds of the Sierra Macarena region appear to be nearer the former.

***Atalotriccus pilaris pilaris** (Cabanis)

Los Micos, 2 ♂.

A significant and unexpected southward extension of range (east of the Andes) from the Zulia Valley. As *pilaris* is a lowland species there can be no direct contact with the population of Huila and the

Magdalena Valley but the nominate race and *venezuelensis* probably meet and intergrade in the Arauca region.

Myiornis ecaudatus miserabilis (Chubb)

Río Guapaya, ♀.

One previous Colombian record: Río Dudita, eastern base of the Sierra Macarena. The distinction between *miserabilis* and the nominate form is not evident in the Río Guapaya specimen. As I lack material that might permit an independent evaluation of *miserabilis*, the northern race is here recognized tentatively.

Elaenia flavogaster flavogaster (Thunberg)

Los Micos, ♂; Plaza Bonita, ♀.

***Elaenia parvirostris** Pelzeln

Los Micos, 3 ♂, ♀, 1(?); Pico Rengifo, ♀ (April 1–22).

Camptostoma obsoletum bogotensis Zimmer

Los Micos, ♂.

With the exception of certain "Bogotá" specimens this race has been reported only from Villavicencio. The Los Micos bird agrees very well in most respects with the description of *bogotensis* but as it shows points of similarity with *olivasceum* (Caquetá region) the status of the Sierra Macarena population remains equivocal.

Tyranniscus chrysops chrysops (Sclater)

Pico Rengifo, 2 ♀.

Leptopogon superciliaris poliocephalus Cabanis and Heine

Pico Rengifo, ♂, 2 ♀.

Mionectes olivaceus pallidus Chapman

Pico Rengifo, ♂.

Pipromorpha oleaginea chloronota (d'Orbigny and Lafresnaye)

Río Guapaya, ♂.

Recently reported (Blake, 1961, p. 37) northward through eastern Boyacá (El Porvenir, Fátima) at least to Río Arauca on the Venezuelan boundary.

Notiochelidon cyanoleuca patagonica (d'Orbigny and Lafresnaye)

Los Micos, ♂, 3 ♀ (April 26–29).

A southern migrant reported in Colombia from May 11 to October 6. The Los Micos specimens appear to be immature and have little of the bluish gloss characteristic of adults. Hitherto reported east of the Andes only from Quenane (Meta) and Tres Esquinas (Caquetá).

***Riparia riparia riparia** (Linnaeus)

Los Micos, ♀ (April 12).

The three previous Colombian records (September 10, 11, and February 6) are from localities west of the eastern Andes.

Hirundo rustica erythrogaster Boddaert

Los Micos, ♂ (February 22).

Barn swallows are absent from Colombia scarcely three months of the year, as de Schauensee lists numerous records from August 20 to May 15. Their conspicuous appearance and habits may account in part for their apparent relative abundance as compared with that of other northern species.

Cyanocorax violaceus violaceus Du Bus

Los Micos, 5 ♂.

Thryothorus rufalbus minlosi (Berlepsch)

Los Micos, 4 ♂.

One previous record from Meta (Villavicencio). The Los Micos specimens are the southernmost recorded for the species.

Troglodytes aëdon albicans Berlepsch and Taczanowski

Los Micos, ♂.

Paynter (1957, pp. 8–12) has shown that the house wrens of North and South America are conspecific, the species *musculus* thus becoming a synonym of *aëdon*. In his later paper (1960, p. 425), which I here follow, the races *clarus* and *albicans* are merged, as birds from Venezuela, the Guianas, and Amazonas are indistinguishable from the birds of the Pacific slope of Colombia (Nariño) and Ecuador.

Henicorhina leucophrys tamae Zimmer and Phelps

Pico Rengifo, 4 ♂, 4 ♀.

This wren is one of the few Sierra Macarena birds restricted exclusively to the Subtropical and Temperate Zones. It is replaced on the western slope of the eastern Andes by the nominate race, similarly a bird of higher altitudes.

Microcerculus marginatus marginatus (Sclater)

Río Guapaya, 2 ♂, ♀.

Turdus albicollis berlepschi Todd

Los Micos, ♂, ♀; Río Guapaya, ♂, 2 ♀.

Turdus nudigenys nudigenys Lafresnaye

Los Micos, ♂, 3 ♀.

***Turdus leucomelas albiventer** Spix

Los Micos, ♂.

***Platycichla leucops** (Taczanowski)

Pico Rengifo, 8 ♂, 3 ♀.

A subtropical species of wide distribution but seldom reported in Colombia. Known from "Bogotá" trade skins and from Huila and Valle.

Myadestes ralloides venezuelensis Sclater

Pico Rengifo, 7 ♂, 3 ♀.

One of the few typically Andean elements known from the Sierra Macarena where it is evidently restricted to forests of the upper slopes. A male in the British Museum (Natural History) was collected by Doncaster (January 30, 1950) on the "highest peak."

Hylocichla ustulata swainsoni (Tschudi)

Los Micos, 2 ♀; Río Guapaya, 2 ♂; Pico Rengifo, 2 ♂ (February 25–April 13).

Catharus dryas maculatus (Sclater)

Pico Rengifo, 6 ♂, 5 ♀.

Ramphocaenus melanurus trinitatis Lesson

Los Micos, ♂; Río Guapaya, ♀.

***Anthus lutescens lutescens** Pucheran

Los Micos, ♀ (March 2).

A bird of wide distribution east of the Andes but not previously known from Colombia except as "Bogotá" trade skins.

Vireo olivaceus olivaceus (Linnaeus)

Los Micos, ♂; Río Guapaya, 2 ♂ (March 17–April 22).

Vireo olivaceus chivi (Vieillot)

Los Micos, ♂ (April 2).

The four previous Colombian records of this southern race are from various localities in the llanos of Meta (May 15–22). Wing, 67.5; tail, 46.

Hylophilus ochraceiceps ferrugineifrons Sclater

Los Micos, ♂.

Chlorophanes spiza caerulescens Cassin

Los Micos, 2 ♂, ♀; Río Guapaya, 3 ♂, 2 ♀.

Cyanerpes caeruleus microrhynchus (Berlepsch)

Río Guapaya, 2 ♂; Pico Rengifo, 2 ♂, 4 ♀.

Dacnis cayana cayana (Linnaeus)

Los Micos, 2 ♂, ♀; Río Guapaya, ♂, ♀.

These birds represent an intermediate population that clearly is nearer the nominate race than *glaucogularis*. De Schauensee considers birds from Florencia and Morelia near the latter but not perfectly typical.

Dendroica fusca (Müller)

Pico Rengifo, ♂ (April 4).

Dendroica striata (Forster)

Los Micos, 2 ♂, 3 ♀; Río Guapaya, ♀ (February 25–April 17).

Seiurus noveboracensis subsp.

Los Micos, ♂ (April 13).

I am unable to allocate this specimen with certainty. All three recognized races have been reported in Colombia as winter visitants (September 8–April 30) but little is yet known of their distribution.

Geothlypis aequinoctialis aequinoctialis (Gmelin)

Los Micos, 2 ♂, 2 ♀.

Wilsonia canadensis (Linnaeus)

Pico Rengifo, ♀ (March 31).

Setophaga ruticilla (Linnaeus)

Los Micos, ♂, ♀; Pico Rengifo, 2 ♀ (February 23–April 3).

Myioborus miniatus ballux Wetmore and Phelps

Pico Rengifo, ♂.

Basileuterus rivularis fulvicauda (Spix)

Río Guapaya, ♂, ♀.

Sierra Macarena birds resemble *semicervinus* in coloring of the tail but are nearer *fulvicauda* in all other respects. The race is also known from "Bogotá" trade skins and doubtless occurs much more extensively in southeastern Colombia than present records indicate.

Gymnostinops yuracares yuracares (Lafresnaye and d'Orbigny)

Los Micos, ♂; Río Guapaya, ♀.

Psarocolius decumanus decumanus (Pallas)

Río Guapaya, ♂, ♀; Caño Yerlí, ♂.

Cacicus cela cela (Linnaeus)

Los Micos, ♂; Río Guapaya, 2 ♂.

***Cacicus haemorrhous haemorrhous** (Linnaeus)

Caño Yerlí, ♂.

An unexpected northward extension of range of some 250 kilometers from Morelia and Florencia, Caquetá.

Archiplanus solitarius (Vieillot)

Río Guapaya, ♀.

Psomocolax oryzivorus oryzivorus (Gmelin)

Los Micos, ♂.

Molothrus bonariensis venezuelensis Stone

Los Micos, ♂.

This specimen (wing, 114; tail, 81) agrees in all respects with a series from Arauca (Río Cobaría) and northern Venezuela. Previous Meta records have been limited to the llanos in the vicinity of Villavicencio.

Leistes militaris militaris (Linnaeus)

Los Micos, 11 ♂, 3 ♀.

***Dolichonyx oryzivorus** (Linnaeus)

Los Micos, 4 ♂, ♀ (April 14–22).

Hitherto reported east of the Andes only in Nariño, the main line of passage through Colombia evidently being along the western flank of the eastern range.

Tersina viridis occidentalis (Sclater)

Los Micos, 3 ♂; Río Guapaya, 3 ♂, 2 ♀.

Tanagra xanthogaster brevirostris (Bonaparte)

Pico Rengifo, ♀.

Tanagra laniirostris melanura (Sclater)

Los Micos, 2 ♂; Río Guapaya, ♀.

Tanagrella velia iridina (Hartlaub)

Río Guapaya, ♂, ♀.

Tangara chrysophrys bogotensis Hellmayr and Seilern

Pico Rengifo, 4 ♂, 2 ♀.

Tangara xanthogastra xanthogastra (Sclater)

Los Micos, ♂, ♀; Río Guapaya, ♂, ♀.

***Tangara arthus sclateri** (Lafresnaye)

Pico Rengifo, 6 ♂, 2 ♀.

As reported elsewhere (Blake, 1959) Macarena males agree perfectly with the type of *sclateri*. Previous records of this race have been limited to the western slope of the eastern Andes in Departamento Santander.

***Tangara xanthocephala venusta** (Sclater)

Pico Rengifo, ♂.

The sole record from Colombia, east of the Andes, between Nariño and Norte de Santander.

Tangara mexicana boliviana (Bonaparte)

Río Guapaya, 3 ♂.

Tangara gyrola catharinae (Hellmayr)

Pico Rengifo, 5 ♂, 5 ♀.

Tangara cayana cayana (Linnaeus)

Los Micos, ♂, ♀ (?).

***Tangara nigroviridis nigroviridis** (Lafresnaye)

Pico Rengifo, ♂, ♀, 1(?).

Also reported east of the Andes in Cundinamarco and the Nariño-Putumayo region.

Thraupis virens leucoptera (Sclater)

Los Micos, 3 ♂, 3 ♀.

Thraupis palmarum melanoptera (Sclater)

Los Micos, 2 ♂, 2 ♀; Río Guapaya, 2 ♂, 3 ♀.

Ramphocelus nigrogularis (Spix)

Río Guapaya, 2 ♂, 2 ♀.

Ramphocelus carbo unicolor Sclater

Los Micos, ♂, 3 ♀; Río Guapaya, 2 ♂.

Birds from the eastern flank of the Andes are intermediate to *venezuelensis* and *carbo* and might properly be referred to either as

non-typical representatives. However, it seems desirable to recognize *unicolor* in order to emphasize the progression of variation in the cline.

Piranga rubra rubra (Linnaeus)

Los Micos, ♂ (February 26).

Piranga olivacea (Gmelin)

Río Guapaya, 2 ♂, ♀; Pico Rengifo, ♂ (March 17–31).

***Habia rubica rhodinolaema** (Salvin and Godman)

Los Micos, ♂, ♀; Río Guapaya, ♂, ♀.

A significant extension of range from Morelia, Caquetá. *Coccinea* of northwestern Venezuela has been found east of the Andes in Boyacá (La Colorado) but Sierra Macarena birds are easily distinguished by their weaker bills and, in males, by the paler, less uniformly red coloration of the under parts.

Tachyphonus surinamus brevipes Lafresnaye

Los Micos, 2 ♂, ♀; Río Guapaya, 4 ♂, 4 ♀.

Chlorospingus ophthalmicus macarenae Zimmer

Pico Rengifo, 8 ♂, 6 ♀.

Schistochlamys melanopis aterrima Todd

Los Micos, 6 ♂, ♀.

Saltator maximus maximus (P. L. S. Müller)

Los Micos, ♂, ♀.

Pitylus grossus grossus (Linnaeus)

Río Guapaya, 4 ♂, ♀; Caño Yerlí, ♂.

One previous Meta record: Río Ocoa, near Villavicencio.

Cyanocompsa cyanoides rothschildii (Bartlett)

Caño Yerlí, ♀.

Spiza americana (Gmelin)

Los Micos, 3 ♂, 3 ♀ (February 28, April 11).

Spermophila plumbea whiteleyana Sharpe
Los Micos, ♂.

Spermophila minuta minuta (Linnaeus)
Los Micos, ♂; Río Guapaya, ♀.

Volatinia jacarina splendens (Vieillot)
Los Micos, 3 ♂.

Sicalis flaveola flaveola (Linnaeus)
Los Micos, ♂, 2 ♀.

Atlapetes brunnei-nucha brunnei-nucha (Lafresnaye)
Pico Rengifo, 5 ♂, 5 ♀.

Arremon taciturnus axillaris Sclater
Los Micos, ♂, ♀; Río Guapaya, ♀.

Arremon conirostris conirostris (Bonaparte)
Los Micos, 3 ♂, 2 ♀.

Myiospiza humeralis humeralis (Bosc)
Los Micos, 6 ♂, ♀.

Emberizoides herbicola sphenurus (Vieillot)
Los Micos, 4 ♂, 3 ♀.

This series is indistinguishable from Guiana specimens and hence readily separable from the gray-backed race, *apurensis*, of northwestern Venezuela. Presence of the latter at Quenane (Meta), only 35 km. east and a little south of Villavicencio, has recently been reported by de Schauensee (1959, p. 74).

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